

## **Clarification of Residential Irrigation Testing and Pre-existing Noncompliant Issues**

A City of Raleigh residential potable water only meter service connection serving irrigation, car washing, yard hydrant use, pool filling or similar outdoor use shall be protected with a Severe Hazard Reduced Pressure Zone Principle Backflow Preventer (RPZ) that will be required to have an operational test upon installation and thereafter according to City of Raleigh Cross Connection Ordinance Sec. 8-2148(a).

**Operational Test:** Any location that does not have a current passing operational test report on file with the Cross Connection Program will be considered noncompliant. Residents that are in noncompliance can bring their residence into compliance by

1. **Test:** hire an approved City of Raleigh tester to perform an operational test and submit the report to the Cross Connection Program.
2. **Inactivate:** If an irrigation meter is present, it may be removed by calling 000-0000 and the meter will be pulled and the irrigation account marked inactive. Upon notification from the customer and verification of the CC program that the irrigation account is inactive, the resident's information will be removed from current backflow records.
3. **Terminate:** To permanently remove an irrigation backflow assembly, all controls and valves shall be removed with the piping capped or plugged below grade near the source of connection. The meter box, if existing shall be removed. A plumbing permit and inspection is required to cap or plug piping.

**Failed Operational Test:** If an assembly fails its operational test, the property owner will have 90 days [City of Raleigh Cross Connection Ordinance Sec. 8-1253 (a)] to have all repairs made. If the assembly cannot be repaired, the assembly will need to be replaced with an approved RPZ backflow preventer according to the City of Raleigh's Cross Connection ordinances, handbook, and NC State Plumbing code.

**Minimum installation requirements for new, replacement, or relocated backflow assemblies are as follows:**

1. Meter installed for a water only account.
2. The backflow shall be installed no more than 10' from the meter in a visible location
3. Riser/Stand pipes shall be of copper or brass
4. Adequate support must be provided for the assembly in the approved orientation either vertically or horizontally. The assembly may not be supported by other piping or unapproved methods of support. (See: NC Plumbing Code Section 308.5) Approved rigid piping material for the installation of the backflow is copper or brass.
5. Galvanized iron, cast iron, PVC, or black iron is not approved for use between the meter and backflow. (Public Utilities Handbook, p.86, i. Water Service Connections)
6. The RP relief valve shall be a minimum of 12" above any material (mulch) or grade
7. A service valve is required after the meter but before the backflow assembly for maintenance and replacement purposes
8. The installation must also meet all installation requirements per the NC Plumbing Code

For every water only meter utility connection permit issued for the purpose of irrigating, car washing, yard hydrant use, pool filling or similar outdoor use requires the issuance of a plumbing permit from the local inspection department having jurisdiction for the installation of the RP backflow assembly.

Any location that currently has a backflow assembly that is not installed according to the City of Raleigh's minimum installation requirements will be considered a pre-existing noncompliance issue and will be brought into compliance as follows:

- If the noncompliant assembly fails its operational test and cannot be repaired, the new replacement assembly will be installed according to the COR's minimum installation requirements for residential irrigation systems.
- Any residence with a noncompliant assembly that has a test due date of more than one year overdue will no longer be considered pre-existing.
- All non-repairable assemblies will not be considered pre-existing.

It is the property owner's responsibility to ensure that all paperwork showing compliance is submitted to the Public Utilities Cross Connection Program within the required time limit.